START
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March 17, 1993

John R. Hunter
Assistant Manager for Waste Management
U.S. Department of Energy
Richland Field Office
P.O. Box 550, A6-53
Richland, Washington 99352

Re: Schedule for Encapsulation Activities at the 105-KE Fuel Rod Storage Basin.

Reference: (1) Letter P.T. Day, EPA to S.H. Wisness and J.R. Hunter, DOE; "100-KE Fuel Rod Basin", dated December 9, 1992.

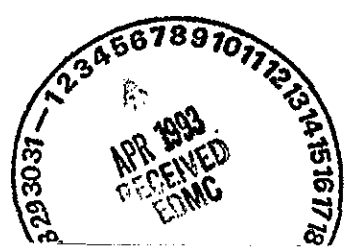
(2) Letter J.R. Hunter, DOE to T.R. Strong, DOH; "Request for Approval of Encapsulation Preparatory Activities at the 105-KE Fuel Storage Basin", dated March 3, 1993.

Dear Mr. Hunter:

This letter highlights our concern for timely initiation and completion of contaminant containment activities in the 105-KE fuel rod storage basin, and requests that the U.S. Department of Energy (DOE) work with us to establish milestones on these activities under the Hanford Federal Facilities Agreement and Consent Order. The milestones are intended to help ensure funding and timely progress on these activities.

The 105-KE fuel rod storage basin contains about 1150 metric tons of fuel rods in open-topped canisters, all immersed in a concrete basin filled with 16 feet of water. The fuel rods release radioactive contaminants to the water to which they are in free contact. Water is intermittently added to the basin to compensate for the basin's loss due to evaporation and leakage to groundwater.

We have previously written DOE (Reference 1) indicating our concern over the groundwater contamination detected in monitoring wells adjacent to the basin, and have requested DOE to undertake expedient measures to complete the encapsulation process. We believe that this source control is a most important first step in the groundwater cleanup effort. About two weeks ago DOE publicly announced a possible leak in the basin. We hope that DOE's acknowledgement of the leak will result in an understood urgency to this issue and facilitate establishment of a cleanup schedule with milestones.



The fuel rod storage basin is within the 100-KR-2 Superfund operable unit. The contaminated soil column beneath the basin is also with the 100-KR-2 operable unit. The groundwater beneath the basin that is contaminated by releases from the basin is part of the 100-KR-4 Superfund operable unit. This groundwater discharges to the Columbia River. The U.S. Environmental Protection Agency (EPA) is the lead regulator for these CERCLA operable units. The 100-KR-4 operable unit is currently the subject of a Remedial Investigation / Feasibility Study (RI/FS). EPA and the Washington State Department of Ecology are planning to include the 100-KR-2 operable unit on the list of RI/FS work plans to be submitted by DOE in calendar year 1994.

We request that DOE propose a schedule -- with milestones -- for encapsulation of the fuel rods and sludge in the 105-KE fuel rod storage basin. The DOE (Reference 2) has outlined the preparatory activities necessary to begin encapsulation. The significant culmination of those activities is that the equipment necessary for encapsulation is installed, tested, and the operators are trained. Encapsulation should begin immediately thereafter. Initiation of the encapsulation is a significant step in the cleanup of this operable unit, and we request a milestone for this activity. We understand the necessity to comply with air permit issues and we expect DOE will expedite this process to accommodate the milestones.

On several occasions, DOE has indicated that the encapsulation run for the fuel rods would take two years to complete. We request a second milestone for this event, and we would support efforts to expedite this two year effort. Additionally, encapsulation of the sludge is to be conducted either concurrently with or subsequent to the fuel rod encapsulation. A third milestone to include encapsulation of the sludge and removal/disposal of the empty canisters is requested. Finally, a plan for disposition of the 1.3 million gallons of contaminated water in the basin is required. Volatilization to the air or loss to groundwater is not acceptable. We request DOE propose a disposition plan and schedule for addressing the basin water.

We would like to meet with DOE as soon as possible to establish schedules and draft the requested milestones. We would expect the change package would be ready for signature by May 14, 1993.

If you have any questions regarding this letter or other items pertaining to the fuel rod storage basin, please contact me at (509) 376-6623 or you may contact our Operable Unit manager for the 100-K area, Larry Gadbois, at (509) 376-9884.

Sincerely,

Paul T. Day
Hanford Project Manager

cc: Anna Beard, DOE
Eric Goller, DOE
Jim Mecca, DOE
Steve Wisness, DOE
Al Conklin, DOH
Terry Strong, DOH
Dib Goswami, Ecology
Dave Nylander, Ecology
Jeff Phillips, Ecology
Roger Stanley/Dave Jansen, Ecology
George Hofer, EPA
Rick Poeton, EPA
Becky Austin, WHC
Herb Debban, WHC
Tony Knepp, WHC
Administrative Record (100-KR-2, 100-KR-4 Operable Units)

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Author	Addressee	Correspondence No.
P. T. Day, EPA	J. R. Hunter, RL	9302179

Subject: SCHEDULE FOR ENCAPSULATION ACTIVITIES AT THE 105-KE FUEL ROD STORAGE BASIN

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